

Abstract of the Disclosure

A water pressure system includes a pressure tank installed underground within the well casing of a well. The water pressure system includes a submersible pump connected to the inlet of the pressure tank by a drop pipe. The outlet of the pressure tank is connected to a second drop pipe and in turn to a discharge pipe for distribution of pressurized water to a house or other building. A pressure switch is connected to the pressure tank for controlling the submersible pump. The pressure tank includes an outer sidewall with an inlet end and an outlet end. A flexible diaphragm bladder located within the outer sidewall is connected between the inlet and outlet of the tank. in a first embodiment, a tube extends through the center of the bladder between an inlet opening and an outlet opening. The tube has a plurality of holes therein to allow water to flow into and out of the flexible bladder. Pressurized air fills the space between the bladder and the outer sidewall to pressurize the water in the bladder. The pressure tank may be used in combination with a flow control valve, a relief valve, a flow control valve incorporating a relief valve, a standard submersible pump, and/or a variable speed submersible pump to provide and maintain a constant flow of water at a constant pressure through the system.

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